

Support For
sinclair

ZX81 - spectrum - 61

and

TIMEX sinclair

1000 - 1500 - 2068

computers

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COLOR PLOTTING ON THE 2068 A HARDWARE INTERFACE FOR THE COMMODORE 1520

A review by P.Fischer

The color image you see was produced on a Commodore 1520 Printer/Plotter as interfaced to the 2068. The interface required comes from John McMichael in Wyoming. Other reviews have appeared on this system, but I always felt, "you gotta SEE it to really understand!"

This system is for people who are looking for an inexpensive way to produce hardcopy color graphics on the 2068.

The interface is, at its minimum, a simple board that is intended to plug into an Oliger Expansion Board. But it is also easy to make it plug directly onto the computer by soldering on the appropriate connector.(or John will, for a small fee).It also comes bundled with a software patch that allows you to drive the plotter from BASIC.

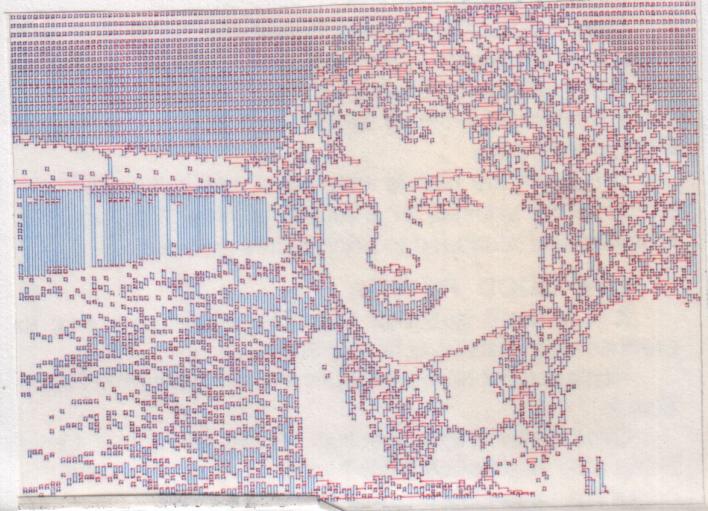
There are also several additional pieces of software available to compliment this system. The two I ordered were PIC-PLOT and SCREEN-TO-PILOTTER. The former simply allows you to load a SCREEN\$ and plot it in one or two colors (2 different sizes). The second allows you to control the plotter mechanism with a joystick or trackball in "real time". You can also load a SCREEN\$ first, then just "trace over" that image. Using this program you can change colors whenever you want. The moves are automatically stored in RAM. When finished you can SAVE these moves to tape for later re-loading and re-plotting so you can make as many copies as you like.

As you can see, the lines drawn by the 1520 are quite fine. This, I feel, is one of its most impressive features. No other device for the 2068 matches this sharpness, as far as I know.

The screen you see was produced by PIC-PLOT, and this is the largest size available. There is another size, about 1/4 of this. So the 1520 obviously does not compete with a commercial plotter by any means. But the price is right; \$30 for the plotter itself, and about as much for the interface. The two mentioned programs are \$9 each. A recent development is that the same interface will also drive an OKIMATE 20 color printer, more on this later.

But the 1520 is a wonder unto itself. It's 6x11x 3" and the mechanism is a bit larger than a cigarette pack. John analyzed it, even went out and bought a VIC 20 to see how it was intended to work. It contains its own ROM which gives it a larger array of functions even without the 2 special programs I got.

I used it mostly with PIC-PLOT (the easiest), you just load in a SCREEN, pick a size, pick the color or colors (red, blue, green or black) and the software does the rest.



The results are mixed. Some plots are spectacular, others only mud. But it's all worth it for the spectacular ones. After a while, you begin to have a feel for which ones most likely will work and which won't. There's a direct correlation with the complexity of the image. The more complex, the more likely the "mud" effect. Also, in the large size PIC- PLOT printout, shadows come out as white, confusing the image.

The time to plot also varies by complexity. Simple images can take as little as 7 minutes. The longest one took slightly over an hour. Obviously you can't stand there and watch it, you have to do something else while it plots.

The biggest problem with this plotter is availability. They haven't been manufactured for some time, so it's necessary to find the plotter FIRST, and THEN order the interface. Possible sources include Commodore users who are selling out their entire systems or perhaps by contacting a Commodore User Group. I bought mine, some time back, from TOYS-R-US. They at one time had 50,000 of them, but appear to have sold out. It's worth a phonecall, however, if there's a store local to you.

The second program I tested was the SCREEN-TO-PILOTTER software, and I liked it. It requires a bit of "eye-hand" coordination to work. No effortless plots here. The basic principle here is that you have a Joystick or (in my case) a trackball and the plotter running. You can move the cursor anywhere on the screen, and then hit enter the plotter will immediately draw the same line on the paper. Move the cursor again, and repeat the process. Each

move is stored in ram and can be re-run for multiple copies. My first attempt was a house on a hill with the sun setting behind it. The house and hill were easy, but when I tried to draw a believeable sun, I fell on my face. I had to draw a circle on a piece of clear plastic, tape the plastic to the screen and then trace it. The didn't work either because my monitor horizontal to vertical ratio was different than the plotter. But I fixed that because my monitor has controls to adjust both. The next time, it worked fine. But it's a slow process. If all goes well, however, the results are rewarding. It strikes me particularly intriguing to do one of these, save the data to tape (or disk) and send it to a friend and let him watch it plot before his own eyes.

PROBLEMS

The PIC-PLOT program "trims" the two sides and bottom of the image. This can sometimes cause minor problems with the resultant plot.

The mechanism itself is delicate and must be treated with extreme care.

The ink in the nibs is watercolor, and dries out if the plotter is left unused for a period of time. They can be removed and recapped to prevent this problem.

THE GOOD POINTS

It is without question the least expensive way to produce color hardcopy from a 2068.

Replacement nibs and paper are available from Radio Shack.

Overall I feel it's an excellent buy for the money. I love being able to produce color hardcopy, and these are the prices I came to Timex for in the first place.

WISH LIST

I wish I could plot a picture using PIC-PLOT and then load SCREEN-TO-PLOTTER and "touch-up" the picture I just plotted. Currently you can't do this since both the termination of PIC-PLOT and the initialization of SCREEN-TO-PLOTTER advance the paper feed on the 1520.

I wish the 1520 screen matched the 2068 screen so that it wouldn't "clip off" the edges.

I wish I could refill the pen nibs with other colors of ink.

I wish that when PIC-PLOT drew the horizontal lines that it started at the top of the image rather than at the bottom. This would allow me to see the image as it's being produced rather than waiting till it's done.

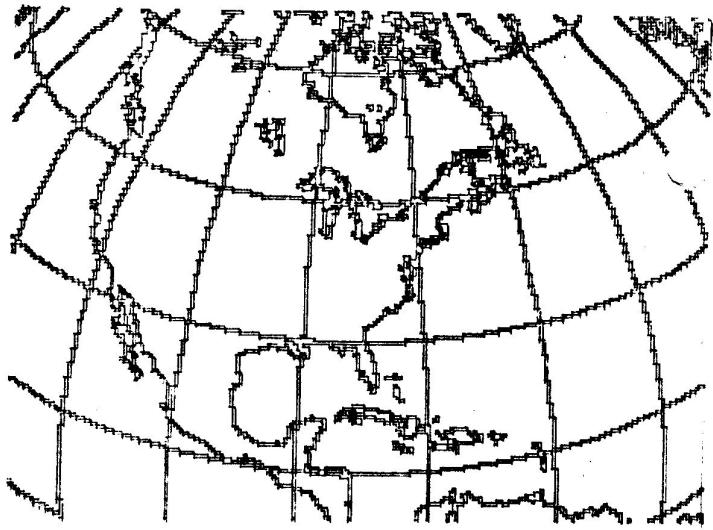
The hardware portion of this system is available in the Olinger tradition, i.e., bareboard (\$15), bareboard with parts (\$21) and fully assembled (\$30), but it's a very simple configuration with only 4 IC's much like an Olinger Parallel printer interface.

Incidentally, there are 200 copies of Timelinez this time around, each one has a different plot on it. So if you know anyone else who gets Timelinez, you can see a different example.

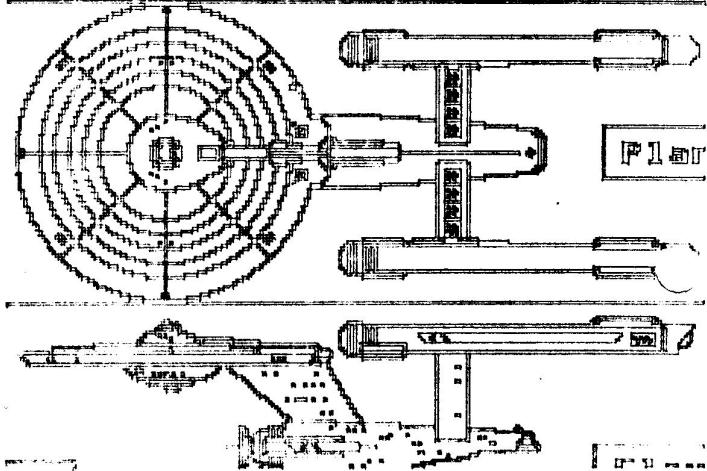
NEW FEATURE

John Discovered that the same interface can also be used to drive an OKIMATE 20 color printer. This printer is very much still in production, albeit slightly more expensive. I haven't gotten one of these, but the sample I saw really impressed me.

For more information, send a S.A.S.E. to John McMichael/1710 Palmer Dr/Laramie,WY 82070.



(Constitution Class Starships)



TT	TIMEXsinclair
II	user group
MM	News-Magazine
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LL	-T/S-PUG
II	-T/S-SUU
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FRONT

PRICE

PRINTED USING
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PROFESSIONAL
COMPUTER AND
THIS PROGRAM.

DESK-TOP PUBLISHING
FOR THE SINCLAIR QL

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Issues 1/88 - present,
contact your editor at
American Micro.

The PDSE Library is
now available to all;
covering T/S1000-1500,
T/S 2068, Spectrum and
the QL.
Contact American Micro
for further details.

S . N . U . G .
MEMOGRAM

When the first news release was sent out in late March, we weren't sure what would happen. As the June 30, 1988 deadline approached, we received approximately 75 cards and letters with an additional 10 phone calls. We were very surprised to hear that we were being discussed in other parts of the world. A letter was sent from Down Under - all the way from Australia. Some of the letters were what we were looking for... opinions as to what people were looking for in an organization of this type. Every single correspondence was in the affirmative - not one had anything to disagree with. The need and desire for an organization such as this is there.

At a meeting of former Winterfest '88 officials, the following was decided on:

1. S.N.U.G. would be a reality
2. The purpose of S.N.U.G. is to act as facilitator between Users Groups and Sinclair users. We want to act as the single source to look to for information about Sinclair and to direct inquiries to the proper sources. Some of the ways to accomplish this purpose is with goals such as the ones listed below. We would have this information on file for distribution.
 - a) Sinclair Oriented Users Groups
 - b) Current and active list of Vendors
 - c) Names and addresses of Sinclair Users (with permission!)
 - d) Accurate and up to date listing of Sinclair specific BBS's
 - e) Public Domain Software Library (PDSL)
 - f) Newsletter and Document Library (NDL)
 - g) Establish a database of known hardware and software problems with available cures
3. General elections for officers would take place in January, 1989.

4. Dues Structure:

\$ 12.00 Individual Membership
\$ 15.00 User Group Membership

5. Membership:

We are targeting Users Groups and for those not associated with a U.G., they may have membership-at-large status.

Initial membership needed - One Hundred (100) memberships between 9/1/88 and 1/1/89 to help to defray start up costs. To be successful, a minimum membership of Three Hundred (300) needed by 6/1/89.

At this point we want to point out we are not in competition with currently established Users groups. The idea has been and always will be to support these groups and not detract from them. They are the backbone of the community. We are here to help them and in turn help themselves. Without them we would have a very difficult road indeed. They are our best friends and we wish to return the favor. This does not preclude the individual user, isolated without ready access to a Users group. Though we hope to put him/her with all Users groups or point him to local users nearby. Who knows? Maybe a new Users group could form.

6. A Quarterly publication to start in 1989 with an annual update of users and Users Groups (Sinclair Annual 1989). Other issues could contain specific info on the organization and possibly an index of published Sinclair related articles during that quarter. Any other submissions will be considered for publication.
7. Publication in the Quarterly Journal of a Calendar of events updated every three months to prevent possible overlap and conflicts of area events.
8. Organization of special interest subgroups such as a Beginners group, individual Disc Operated Systems groups, Pro-file and Mscript software groups for example.

9. Establishing a follow-up' procedure for complaints to vendors.

Long term goals include a forum of interested parties to lead to standardization of hardware and software; making contact with and utilization of software bases in England and other parts of the globe; investigation of release into the public domain of information being held by authorized patent holders of Sinclair Technology; contact former software houses and cottage industries to release their rights and interests in programs no longer on the current market.

To prevent the idea that S.N.U.G. is "VAPORWARE - here in word only", the first order is to get the PDSL up and running. We have offers from some users groups and prominent individuals to donate their libraries. It is our goal to have every published program listing made available to members. We anticipate in the coming year to have the largest base of Sinclair specific software on the continent.

What does this all mean? This idea will not fly without your participation. If you do nothing to prolong the life of your computer now, then eventually there will be no support. Anything less is simply not feasible.

Mel Nathanson

Mail any/all correspondence (including sign up sheet) to:

S.N.U.G.
SINCLAIR NORTHAMERICA
USERS' GROUP
 7515 Arbordale Drive
 Port Richey, FL 3668
 ATTN: Mel Nathanson

Current San Francisco Bay Area club S.N.U.G. member:

Peninsula User Group (PUG)
 P.O Box 1312
 Pacifica, CA 94044

SINCLAIR USERS UNITE!
Sing up for S.N.U.G.!

Sinclair/Tinex Northamerican Users Group is being formed. It will provide all of us with a unified voice to vendors, the latest product info, a list of other members, and the largest library of Public Domain and Shareware software in the United States. For more information fill out the sheet below.

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Work#: _____

Computer Equipment I own and peripherals are:

I would () would not () be interested in having a quarterly newsletter.

I would () would not () be interested in working on or submitting items for the newsletter. Here is a list of some of the programs I have done that might interest other people:

Products that I would like to see for my computer are:

I subscribe to the following computer related publications:

Other user groups I belong to are: _____
 (I've circled my local group)

I would () would not () like my name given to vendors at this time and other computer fests for future mailings. Software I am interested in either Public Domain, Shareware or Commercial is:

MERRY CHRISTMAS

VIEW FROM RAM-TOP

SSEKKRREEECCHH!
WOW! What month is it? December! Really? NO! It couldn't be. I just finished

eating my leftovers from Thanksgiving. Yes, it's now that time to open up all those mail-order catalogs, visit your local department store, and then go completely bankrupt for the rest of the year and the first part of the next. And this is what most Americans call "The Happy Holiday Season".

Seriously, with sales up and boosting this year, now is the perfect time to support your **TIMExsinclair** and **sinclair** vendors. Latest releases from 1988 such as Pixel Print Professional by Lemke Software Development gives the T/S 2068 high quality desk-top publishing. Features like bank switching, 64 column printing, and availability for any disk format just can't be ignored. Bottle Cap Software has introduced Graphit-1, a first in a series of Information Charting programs. Battlestar Xemit and Start-Rek by VP Hasey both look promising as exciting games. For the QL, both hardware and software have jumped. Emsoft's new catalog lists business and financial titles, disk and programming utilities. Meta Media Productions provides one of the best smart terminal programs that supports Unarc, Un crunch, Filters, etc. Digital Precision has announced an IBM emulator. They claim a 95% compatibility with IBM, PC clones, Compaq, and Amstrad. Also a hard-disc driver and interface is soon due. Of course, we can't stop here without mentioning the new arrival of the Cambridge Z88 Personal Laptop computer. It's definitely an "Uncle Clivey" original. The first in its class. And finally the one gift that out does all others, **TIMEdesigns™ MAGAZINE**, the most comprehensive publication for all Sinclair oriented systems.

Either way you choose, you can not loose. So go ahead and buy that 2400 baud modem you've been drooling over, or decide on that disc drive you have been spinning in your head. And while your at it, pick up a program or two (one for the kids and one for you).

The Editors...

NOTE PAD

BY WILLIAM J. PEDERSEN

Sometimes you want to drop off a note to a friend, and you are forever forgetting the address. Perhaps you don't feel like a session with that word processor. Maybe you don't have one and the only printer you have is the T/S 2040.

Whatever the reason, here is a little program that can do a lot in the way of convenience.

You can enter all your favorite people into lines starting at 3001. Don't forget to index them in line 1700.

You put your closing in line 1901.

You can save all this in two copies using GO TO 4000.

Of course you have something different to say each time.

A template is provided as line 1850. Merely copy it as many times as you need as lines 1810 to 1847.

While you are writing, you can print to the screen. Once that meets your satisfaction, you can send it to your printer instead.

To erase a note, use DELETE 1810,1847. Then you can start a new one. You might want to add this as a program line, but most notes aren't so long.

There is also another template for your headings in line 3102.

One last thing. The program lets you make mailing labels.

```

1600 REM **** NOTE PAD ****
1601 REM (c) 1985 W.J. Pedersen
1602 REM
1603 LET Who=3100: LET Where=2:
      LET Print=1801: LIST 1601:
      STOP
1608 REM
1610 REM This program is for
      casual notes and mailing labels if you don't
      want to keep a formal
      file.
1612 REM

```

```

1700 REM 3001 Pen Pal      +
3100 Kermit the Frog
1715 REM
1716 REM   ENTER: LET Who=?????
1717 REM   ENTER: Where=?
    ?=2 for screen
    ?=3 for printer
1718 REM
1719 REM   The following is a
           heading...or label if you
           BREAK at the PAUSE 0.
           ENTER: GO TO print
1720 REM
1801 CLS : GO SUB Who: PAUSE 0
1802 REM
1804 REM   Copy the template as
           often as needed for the
           text.
1810 PRINT # Where;          "
  This is where you write. Copy
  template from line 1850 as you
  need them. Watch your language.
"
1848 REM
1850 PRINT # Where;          "
"
1900 REM
1901 PRINT # Where;          "
  Respectfully yours,""
  Wonderful ME!"
1999 STOP : GO TO 1801
2000 REM
2998   Add your headings at
           1700 and here.
3000 REM
3001 PRINT # Where;"Pen Pal""AL-
CATRAZ""Alcatraz Island, CA 773
40""Dear Birdy,"": RETURN
3100 PRINT # WHERE;"Kermit the F
rog""Star's Dressing Room""The
MUPPET SHOW""BOOBTOOB U.S.A.""
"Dear Kermie,"": RETURN
3102 PRINT # Where;"TEMPLATE" ""
"Dear ?,": RETURN
3104 REM
4001 SAVE "NOTE PAD" LINE 1
4003 SAVE "NOTE PAD" LINE 1
4005 STOP

```

LINKED LISTS

BY LT T. SWENSON

A linked list is a dynamic storage method used in a language like Pascal. It is designed to expand as the user needs it. This is not possible in BASIC, but there are some features of linked lists that can be useful in BASIC.

Let's say you have a list of names that you need to keep sorted. You will be adding to the list often. You do not want to spend the time to re-sort the list every time you add to it, but you still need to keep it sorted. Here is where a linked list comes in handy.

A linked list is a record that has essentially two parts. The first is the data. The second is a pointer to the next record. The pointer tells the computer where to look for the next record. Look at Diagram #1 to see how this works.

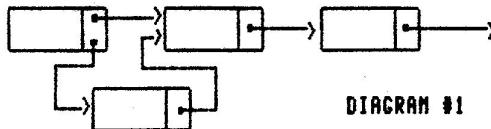


DIAGRAM #1

The way we will implement linked lists is to store the data in an array and have a pointer array that says "for record X the next record is at "Y"". Or in BASIC, pointer (X)=Y. Each new record will be added to the array in the next open position. The third record entered will be added to the array in the next open position. The third record entered will be in the third place in the array. There is also a ROOT pointer that tells us where the first record is. First meaning the first in the sort.

When we insert a record we only change the data in the record before it (by the pointer) and the new record. Look again at Diagram #1 to see how the pointers change for the two records involved.

Diagram #2 shows a before and after of the array as it is seen to BASIC. Note the data does not change, just the pointers.

BEFORE		AFTER	
B	4	B	4
ROOT ->	A	ROOT ->	A
F	0	F	0
C	3	C	5
		D	3

DIAGRAM #2

All four situations must be handled slightly differently. Each one has a comment before it in the program so you can see how each is handled. The program handles only inserting, but deleting can also be added to it. The program allows you to print out the sorted list to show you that it is sorted.

The process may look complicated, but it saves you a lot of time over sorting. A lot of times the most efficient method is fairly complicated.

Type in the program below to see how this works. It looks long and complicated, but it is

not. A lot of it is to take care of special situations. As you insert into the list four things can happen:

- 1) Linked list is empty.
- 2) New record is inserted at front of list.
- 3) New record is inserted at end of list.
- 4) New record is inserted someplace else (happens most often).

```

100 DIM stores$(20,10)
110 DIM pointerarray(20)
120 LET root = 1
130 LET count = 1
140 CLS
150 PRINT "1] Enter new string"
160 PRINT "2] Print out"
170 PRINT
180 INPUT "Enter choice : ";
choice
190 PRINT
200 IF choice=1 THEN enterstring
210 IF choice=2 THEN
220   printout
230   PRINT
240   PRINT "Hit any key to
continue"
250 PAUSE
260 END IF
270 GO TO 140
280 DEFine PROCEDURE enterstring
290 INPUT "Enter String : ";in$
300 LET pointernew = root
310 REMark ARRAY IS EMPTY
320 IF stores$(pointernew)=""THEN
330   stores$(count)=in$
340   root = count
350   pointerarray(count)=0
360   count = count + 1
370   RETurn
380 END IF
390 REMark INS IS BEFORE FIRST
ENTRY
400 IF in$<stores$(pointernew)
THEN
410   stores$(count) = in$
420   root = count
430   pointerarray(count) =
pointernew
440   count = count + 1
450   RETurn
460 END IF
470 REPeat loop
480 LET pointerold = pointernew
490 LET pointernew =pointerarray
(pointernew)
500 REMark REACHED END OF LIST
510 IF pointernew = 0 THEN
520   stores$(count) = in$
530   pointerarray(count) = 0
540   pointerarray(pointerold)=
count
550   count = count + 1
560   EXIT loop
570 END IF
580 REMark REACHED PROPER PLACE
FOR INS

```

```

590 IF in$<stores$(pointernew)
THEN
600   stores$(count) = in$
610   pointerarray(count) =
pointernew
620   pointerarray (pointerold) =
count
630   count = count +1
640   EXIT loop
650 END IF
660 END REPeat loop
670 END DEFine
680 DEFine PROCEDURE printout
690   CLS
700   LET pointer = root
710   PRINT stores$(pointer)
720   LET pointer = pointerarray
(pointer)
730   IF pointer = 0 THEN RETurn
740   GO TO 710
750 END DEFine

```

PUG'S NEWSLETTER EXCHANGE PAGE

BoSUG Sinclair/Timex Newsletter.....

JUST FOR FUN
Reset the QL and enter CLS 100. Fun, huh? OK, reset the QL again. Why doesn't it happen with CLS 99 or CLS 101? I don't know either.

CCAT/S USER GROUP The Plotter.....

Recently I read that the some 6000 computers inflicted with virus were all of the type that depends on the operating system input by disk. It was the OS that was stored on disk that was contaminated. Our lowly TS types with self contained OS should be safe from this type of virus (OS virus?).

LONG ISLAND SINCLAIR\TIMEX USERS L.I.S.T.ing Newsletter.....

Brooklyn Closeout Corp. has confirmed that they still have TIMEXsinclair 2068's for sale. Bargain with them to get the best price.

1988 Sep 17 14:37:06
 f1p1_ss88915a_lis
 880915.1332; 557_WORDS;; (S)LIX
 ((S)inc(L)ink (I)nformation
 E(x)change);;
 (S)hareware_Article;;
 Filename:: ss88915a
 (sa88418a);;

HOW TO MAKE YOUR TIMEX SINCLAIR
 COMPUTER COMPATIBLE WITH:::
 AMIGA, APPLE II, ATARI,
 COMMODORE, CP/M, IBM,
 MACINTOSH, & MORE...

First you need an Amiga,
 Apple_II, Atari, Commodore,
 CP/M, IBM (or clone),
 Macintosh, or other computer
 with a serial port to use as a
 File Server Computer..

These aren't hard to find. Look
 around, you will probably find
 one laying around the house
 somewhere..

If not, maybe a friend has one,
 or you can get someone to give
 you one they are not using..
 Only buy one as a last resort...

Next you need two things for
 your Timex Sinclair:::::

1. A serial port interface..
- * The QL has a couple built in..
- * The TS2088 may be able to use
 the ones in the Timex Portugal
 disk unit..
- * The Spectrum may be able to
 use the one in the Wafadrive
 (although we suspect it is only
 one way)..
- * For the TS1000, you can
 probably buy or make one (This
 is also an option for the
 TS2088 and Spectrum). Some
 people will tell you this isn't
 to difficult (but they may not
 tell you where to buy one or
 how to make one)...

2. Some Software: This is the
 subject of this article...

What does the software need to
 do?..
 At the very minimum it should be
 able to::

- * Format a disc..
- * Get a Directory..
- * View a File on the TS
 display..

These three items are pretty
 easy to do by redirecting the
 File Server Computer I/O as
 demonstrated in 'QL to PC Clone
 Cable & Test Program' Shareware
 File (ts88726a) by Mark Wahl
 and Terry Greenlee...

In addition, it must be able
 to:::

- * SAVE a TS File (BASIC &
 BYTES)..
- * LOAD a TS File (BASIC &
 BYTES)..

This isn't so easy and is
 probably where most of the
 development effort will be...

Additional desirable features
 would be:::

- * Print a File to the TS Printer
 one sector at a time..
- * Manipulate an ASCII file a few
 sectors at a time..

Some software will probably be
 required for the File Server
 Computer..

Hopefully this would be mostly
 in BASIC with the routines that
 need to be fast written in 'C'
 (for portability) or in Machine
 Code (Assembly)...

One question that needs to be
 answered is 'What should this
 software look like to the
 User?'..

We suspect it should be menu
 driven, and the BASIC portions
 (and the source code for the
 'C' and Assembly portions)
 should be written in a very
 'readable' manner so that it
 can be 'maintained' (customized
 or changed) easily by the
 user...

Mark Wahl is investigating 'C' &
 68000 Assembly Source Code from
 MINIX, MINIX messages on
 USENET, AMIGA Shareware, & GNU
 (GNU's Not UNIX) for use in
 this project...

Mike Furman is working on an
 RS-232 Interface design for the
 TS1000 that should be adaptable
 to the TS2088... .

This seems to be an interesting
 project since it would make the
 TS Computers much more useful
 at an economical price and
 provide an opportunity to learn
 more about BASIC, 'C', and
 68000 Assembly Language...

If you would like to help with
 this project, contact::::

SincLink..
 c/o Bill Miller..
 (408)253-3175..
 6675 Clifford Drive..
 Cupertino, CA 95014-4530...

880915.0942;; ss88915a;; END....

1988 Dec 09 10:00:37
file: sc8812.lis
BB1209.0953;; words: 1041;;
(S)inLink;; (N)ewsletter;;
Filename: sc8812 (sc8812);;

Page 1...
SincLink Newsletter..
Volume 6; Number: 12..
Dec, 1988...

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BYTES)..
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'Subscribing' to SincLink?..
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8811 SLIX Contacts (32)
(sc8811.lis, 25920)..
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(122 months), 8810? Addresses
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8 LOOKING FOR TINEX SINCLAIR
SHAREWARE SOFTWARE?..
8 TS PRODUCTS FOR SALE?..
8 LISTING TS USER GROUPS?..
8 NEWSLETTER EXCHANGE?..
8 Back issues of TIMELINEZ/
SincLink are available..
8 SincLink RENEWALS DUE?..

8 (c) Copyright 1988 SincLink..
May be freely copied for non-
commercial use only. Please
give credit to author and
source. For commercial use,
contact SincLink,
408-253-3175...

1988 Dec 08 10:04:21
file: sc8811.lis
BB1208.1331;; words: 3352;;
(S)LIX;; (C)ontacts;;
Filename: sc8811 (sc8811) (1)_Page
(File);;

SLIX Contacts 8811 (32);;...

8 881130/GUTS/SV? Meeting;
Attendees (4): Bill Miller;;
Mark Wahl;; Bob Kuster;; Terry
Greenlee..
88 Bill brought SincLink
Exchange Newsletters and
Contact;;
88 sc8811 (7)..
88 sc8811 (31)..
88 sc8810 (11)..
88 sc8810 (34)..
88 Mark showed the Save & Load
Patch for the RL 'Pay Check
Analyzer' Program (TIMELINEZ
8811 page 39)..
88 Bob brought the TS2048
Shareware and Commercial
Libraries. Thanks Bob!

He plans to copy the Shareware
Library to his JLD Disk System.
After that is accomplished, we
may be able to prevail upon him
to be the Shareware TS2048 JLD
Disk Librarian?..
Bob also promised to make us a
list of his Sinc and Syntax
Library..
Bob also reports (in answer to
Richard Matejovic's
881008.1617-1703 question
about a source for the 'Ninky
Board II' TS1000 tape loading
aid) that they are still
available from: TS Vendor:
Russell Electronics;;
B14-364-1325;; RDI, Box 539;;
Centre Mall;; PA;; 16028;;

8 Disclaimer: SincLink and
Authors disclaim responsibility
for the results of hardware
modifications to your computer
system..
If you are not SURE of your
capabilities, get someone with
more experience to help you...

8 What is SincLink?..
SincLink is the name of the
original publication of the
Group Using Timex Sinclair of
Silicon Valley (GUTS/SV)..
SincLink was first published in
April, 1982..
Parts of SincLink are usually
printed in TIMELINEZ, the
publication of Timex Sinclair
East Bay 200 User Group
(TSEB200), Timex Sinclair
Peninsula User Group (TSPUG)
and GUTS/SV...

8 What are the advantages of
'subscribing' to SincLink?..
The purpose of all user groups
is to share information..
The best way to do this is thru
a newsletter, since most
members cannot attend every
meeting..
If you have a problem (or a
solution), the best way to ask
for help (or give help) is thru
the newsletter..
The newsletter also usually
contains information about
other User Groups around the
nation and world that we gather
thru our newsletter
exchanges...

(from: TIMELINEZ 8501 Page
98)..
He had some trouble with the
3.5in 720K Toshiba drive he was
using with his GL and sent it
back for head alignment, but
didn't get an RMA (Return
Merchandise Authorization)
number, and now it seems to be
lost..
He is using 3.5in Single Sided
drives that he bought for \$19
each..
Bob plans on attending the
PC UNIX SIG the first Wednesday
of the month at 7:00pm? at AT&T
on Duane Ave. in Sunnyvale..
88 Terry gave a SHAREWARE FILE
WARNING!! Filenames ts88726a
(rsrcable); Description: 'GL to
PC Clone Cable & Software by
Mark Wahl & Terry Greenlee'
(TIMELINEZ 8807-8 page 372 and
SincLink 8807-9 page 6) has
errors in the cable wiring
diagram!! DO NOT USE IT. It
could do permanent damage to
your computer. Terry has
promised to get us a correct
file..
Terry also promised to help Bob
learn to use his AT&T 3200,
UNIX, and 'C' Compiler...

8 881130.1725/Call from: Mike
Furman..
Mike says he will not be able to
attend the GUTS/SV? Meeting
tonight..
He reports Bill Miller has been
purged from the LogOn/SV DDS
for not calling since about
8803. Mike volunteers to be a
'Pseudo' Bill Miller and keep
him active on the DDS. We will
keep a record of all messages

8 How do I 'subscribe' to
SincLink?..
For User Groups (even small
ones- there is nothing wrong
with a one person User Group
that puts out it's newsletter
on a TS2040), we would prefer
to exchange newsletters on disk
(or paper if disk is not
available)..
If you just can't exchange
newsletters, the best way to
'Subscribe' to SincLink is thru
SLIX ((S)inLink)ink
(Information EXchange)..
Send us some Sinclair related
information and we will send
you a current SincLink and a
'SLIX Contacts' printout with
your information in it so that
you can check it for accuracy
and suitability..
Mail exchange newsletters or
information (on disk or
paper)to:..

SLIX..
c/o Bill Miller, 408-253-3175..
6675 Clifford Drive..
Cupertino, CA 95014-4530..
You may also call your
information in to the telephone
number listed above..
The information will become part
of the Permanent SLIX Database
which will be made available to
all SLIX participants in as
many disk formats as we can
manage..
The preferred method for
exchanging information is as
ASCII text on 3.5in or 5.25in
floppy diskette using:
88 MFM (Modified Frequency
Modulation- double density)..
88 80 or 40 cylinders..
88 (2) tracks (heads) per
cylinder..
88 (9) 512 BYTE sectors per
track..

to him and attempt to answer
those he can. All he needs is
the password and access key..
Mike also says he will try to
work on the following projects
(6):

88 List of all the items Mike
has borrowed from the SincLink
Library..
88 List (or at least quantity)
of all Mike's Timex Sinclair
items not already listed in the
SincLink Inventory:..
88 Documents..
88 Magazines..
88 Books..
88 Software..
88 Hardware..
88 TS1000 RS-232 design and
prototype..
88 TS1000 user defined character
set..
88 TRS-80 CoCo Hi-Res Graphics
using the TM991BA..
88 TRS-80 CoCo Read & Write an
MS(DC)-DOS 360K Disc under
TRS-DOS or DS-9..
Mike...
Thanks for volunteering to be
the 'Pseudo' Bill Miller. The
password and access key are
attached...

8 881128.2141/Call from: Andy
Hradesky..
Andy says TIMELINEZ costs \$0.035
per page to produce..
At 14 pages to include SincLink
8810-11, this seems to be
within SincLink's \$1.25 per
issue budget..
It appears we can finance
TIMELINEZ fulfillment of
SincLink subscriptions out of
the SincLink account and still
have finances for the

The preferred disk formats (in
descending order of preference)
are:..

88 GL 3.5in, 720K..
88 GL 5.25in, 720K..
88 GL Cartridge or other GL Disk
Formats (Single Sided, 3in,
etc.)..
88 NS(DC)-DOS 3.5in, 720K
(Preferred Standard 3.5in)..
88 NS(DC)-DOS 5.25in, 360K
(Preferred Standard 5.25in)..
88 NS(DC)-DOS 3.5in, 1.44MB..
88 NS(DC)-DOS 5.25, 1.2MB..
88 C64/128 3.5in, 800K..
88 C64/128 5.25in, 340K..
88 Amiga 3.5in, 800K..
88 TS2048 5.25in, Larken 800K..
88 TS2048 3.5in, Larken 800K..
88 Macintosh 3.5in, 400K..
88 Macintosh 3.5in, 800K..
88 'Wally' 256MB Optical Disk...

If you don't have a disk system
that can read and write any of
these formats, parts of
SincLink are available in
TIMELINEZ..
TIMELINEZ subscriptions are
available (\$15 Annually) from:
American Micro Connection..
408-270-9730..
2175 Aborn Road #262..
San Jose, CA 95121...

If you absolutely MUST have most
of SincLink in printed form and
you already subscribe to
TIMELINEZ, subscriptions to
SincLink are \$10.00 per year.
If you do not subscribe to
TIMELINEZ, subscriptions are
\$15.00 per year..
Make check or money order
payable to:..
SincLink..
Mail to:..
SincLink..
c/o Bill Miller, 408-253-3175..
6675 Clifford Drive..
Cupertino, CA 95014-4530...

Information Exchange,
Newsletter Exchange, and
Library Projects..
All we will need is a list of
SincLink subscribers to which
an issue of TIMELINEZ was
mailed to fulfill their
subscription and we can mail a
check for that fulfillment to
American Micro Connection...

8 881128.0952/Call from: Bob
Kuster..
Bob reports he has a JLD Disk
System for his TS2048 and he
would like to back up the
TS2048 Public Domain Library to
his JLD System. We suggested he
get the library from Andy and
bring it to the 881130 Meeting
at the Cupertino Library...

8 881127/San Jose Mercury News
Computing Section Page 46,
'Agenda';; Jack Davis;;
ACD-TEL-MUNI87;; 'Agenda'
Editor?;; 750 Ridder Park
Drive;; San Jose;; CA;; 95190..
Jack...
Thanks for publishing the
information about the Timex
Sinclair SIG of the Computer
Workshop meeting at Stanford
University every Saturday
Morning..
However, the Last Wednesday of
the month meeting of the Timex
Sinclair Silicon Valley Users
was omitted. Hope you haven't
forgotten us and this was just
due to an oversight or lack of
space..
The item should read:..

Timex Sinclair Silicon Valley
Users will meet at 7:00pm at

the Cupertino Public Library,
10400 Torre Ave., Bulletin
Board Service (408)745-0880.
Call Bill Miller at
(408)253-3175..

Thanks again for the 'Agenda' section. Many users of many different types of computers depend on it to find out when groups of interest to them meet...

* 881126/TCH TS SIG Meeting;;
Attendees (10); Fred Waters;;
Dick Delp;; Mark Mahl;; Bill
Baker;; Howard Lebowitz;; Carl
Linden; ??; ?.

Topics:

88 'How To Write An MS(DOS)-Disk'; by: Dick Delp;;
Handouts: (9) Page Document &
320K Disk.

88 'Tetris' an ASCII Graphics
Game from Russia;; by: Fred
Waters...

* 881123/TSEDZUS Meeting?...

* 881121.2243/Call from: Andy
Hradesky..

Andy says he got (6) exchange
newsletters & a letter from Ray
Youngberg from George at the
881120 TSPUG Meeting..

Andy also reports he has a
Legend 880 printer & Jason B
parallel Printer Interface FDR
SALE for \$120. He has been
using it with his TS2040 but is
now using a Serial printer with
his Portuguese Disk Drive
System...

* 881121/Letter from: Maurice
O'Donnell; ACB-TEL-NUMB?;;
POB 1106; Ft. Bidwell; CA;
96112..

Maurice found out about us free
Compute! 8811 'Discoveries'
sent him by a friend who is
into computers...

Maurice says that last summer he
received a TS1000 (with 16K
RAMpack) as part of a
promotional package but with no
manual..

He says he is not into
computers, but would like to
pass it along to a young
neighbor..

He is looking for a source for a
TS1000 Manual..

Maurice:

Thanks for the SASE!..

We aren't in the business of
selling TS1000 manuals (mainly
because we can't replace them),
but we do have a policy to loan
items out of our library to
subscribers for a deposit equal
to the cost of the item plus a
nominal Shipping and Handling
Fee..

In the case of the TS1000
Manual, the cost would be:
88 TS1000 Manual; \$10.95
(Refundable upon return within
30 days; 10% per month deducted
from deposit or subscription
after that)..

88 S & H; \$2.00..

88 Total; \$27.95..

Make Check or money order
payable to...
SincLink..

Mail to..

SincLink..

c/o Bill Miller, 408-253-3175..
4675 Clifford Drive..
Cupertino, CA 95014-4530..

Hope this helps...

* 881121.1434/Call from: Dan
Crane; 408-756-7374 (work)..
Dan contacted us some time ago
about help for his children in
college who have Amdahl Word
Processors..

He is now looking for a source
for 3in Diskettes and printer
ribbons for them. He says Sears
(where he bought them) disavow
all knowledge of Amdahl..

We suggested: Bob Orrefelt;;
415-387-9136;; since Bob also
has an Amdahl Word Processor..

We also suggested: 'Electronic
Express'; 214-247-4900;;
since they advertised the
'Sinclair' (Amdahl) PC in
Compute! 8810 (880916)..

We mentioned: Amdahl Vendors;
Brice Road Pharcacy;;
614-361-3600;; 1653 Brice
Road;; Reynoldsburg; OH;
43068; from: 1810 NL 8706
(870724) page 3 is listed as an
Amdahl dealer in Computer
Shopper 8812 page 298 'More
Timex Sinclair' Column..

We forgot to suggest: Sharp's;;
804-730-9697;; (at least for
the 3in Diskettes)..

The 881120 'Best' Catalog Sheet
Page 29 lists 'Smith Corona
Data Disk (3in)? for PMP3
Personal Word Processor;
85.99'..

American Micro Connection;;
408-270-7730;; say have 3in
diskettes for sale..

Don promised to inform us if he
finds someone who still
supports the Amdahl Word
Processor...
881121.1027/Call to: Carl
Rink..

Carl reports he just purchased
an RS-232 interface and Avatek
NUMBER for his TS2040 from Ed
Gray. Also included is some
software to make the RS-232

work. It is on a 3.25in Disk in
Larken Farata..

Carl suspects he will need some
help transferring it to 3.5in,
and getting the whole thing to
work with his Larken System..

He will be going into the
hospital for surgery the first
week in December and will
probably be ready to attack the
project at the beginning of
January...
881120/TSPUG Meeting;;
Attendees (10); Rex Lundgren,,
Bill Miller,, George Goodman,,
George & Sonja Mockridge,,
Kevin Leung,, Walt Johnson,,
Bob Orrefelt,, John Hancock &
Andy Hradesky..

88 Rex showed the Theatrical
Light Controller Project he has
been working on. It is designed
to be used with a computer, but
he hasn't decided which one
yet..
88 Bill brought the SincLink
Exchange Newsletters and
Contacts;;
88 sc8811 (3)..
88 sc8811 (19?)..
88 sc8810 (11)..
88 sc8810 (34)..

Bill also commented that 'Uncle
Clive' seems to have solved the
'Bank Switching' problem that
gave Timex and Bill Pedersen so
much trouble..

88 George Goodman tried out the
280 that Walt Johnson borrowed
from Malcolm McAffee;;
415-751-5305 (830421)..
88 George Mockridge brought the
TIMELINEZ Newsletter Exchange
Newsletters for:
88 881121 (7 + Letter from Ray
Youngberg (sc88107)):

CATS_NL 8811 (Bill)
loaned George a 21-Appeal 8810
in exchange for the loan of
this one)

SLUG_NL 8811? 7 2222
? 2222
? 2222
? 2222
? 2222
? 2222
Andy took (6 + the Letter)
home..

George also suggested the
TIMELINEZ Groups take up a
collection for a \$13 Membership
in SHUB.

88 Sonja helped collate
TIMELINEZ 8811. She said she
missed the job :-)..

88 Kevin reported he is TS SIG
DP on the 'NetWare' DOS at
415-753-5265 (Answer 'TS2' to
'Type Terminal?' Question).

Kevin says he has his own
seemingly unlimited file area
(to which he has uploaded some
TS2040 Software) plus access to
'Usenet' for \$0.01 per minute..

88 Walt demonstrated the 280 he
borrowed. He likes it so well
he intends to buy one..

He denied printing out files to
a standard parallel printer
using the 280 serial to
parallel cable..

He has been using it for about a
week to replace his TS2040 for
his Hospital Chaplain duties
and for keeping track of
weddings at which he
officiates..

He plans to use the Hospital
PC's if he needs to save files
to Disk or view them on a
monitor..

He has already printed out some
280 files on the Hospital Laser
Printer..

He has about 160K RAM in the 280
and still has about 77K free..
He says the batteries got so low
the display started to have
strange lines and spaces on it,
but the data was still O.K. and
he was able to replace the
batteries without losing
anything..

88 Bob Orrefelt reported he got
an Information Package from
Bill Pedersen on TS2040 Bank
Switching..

He also said he will look into
providing a service to put
TS1000/1500 and TS2040 programs
in ROM..

88 John Hancock reported he has
had a Mac for about a year;
but he still uses about (10)
TS1500's with ROMpacks in a
music class he teaches..

88 Andy delivered TIMELINEZ 8811
to the meeting..

88 George Mockridge traded a
CATS 8810 Newsletter to Bill
for a 21-Appeal 8810...

881119/TCH TS SIG Meeting;;
Attendance (11)..
New Attendees (Introduced by Mark
Mahl); Alan Hoque;;
408-737-9523;; 410 Morse Ave.;
Sunnyvale; CA; 94086..

Alan has a Macintosh..

Topics:
88 'Horology; The History and
Mechanics of Time Keeping' by
John Brass..

88 'MS-DOS Disk Organization' by
Dick Delp...
881117.1442/Call from: Jerry
(881115.1600); 408-292-7343..

Jerry has (3) Headache items FDR
SALE for the TS1000. He asked
what we thought they were worth
and we 'guessedimated' a price
for each:
88 (2) 32K RAMpacks; \$10-920ea..

88 (1) Centronics style printer
interface; \$20-940...
Roger found out about us free
Compute! 881121..

He reports he has had a TS2040
for about 4 years. He also has
the TS2040 printer and a speech
synthesizer. He got an Atari
800 XL System about a week

881116/Call from: Jack Davis
of the San Jose Mercury News..
Jack called to confirm the
Saturday meeting after
Thanksgiving..
He confirmed the meeting and
also told him that the BBS for
the Wednesday meeting is the
same as the BBS for the
Saturday meeting:
(408-745-0880)...
881115.1623/Call from: Sherman
Lee (880513.1830);
408-924-3812..
Sherman is looking for a TS2040
printer to buy. He suggested:
American Design Components
(880722); 201-939-2710..
He also explained our policy of
leasing items free from the SincLink
Library (we have (6) TS2040's)
to subscribers for a deposit
(refundable upon return) equal
to the price of the item (\$40
in the case of the TS2040)..
Sherman plans to attend the
Saturday meeting at Stamford...

881115.1600/Call from: Jerry
at American Opinion Book
Store;; 408-292-7343.. Jerry
Computer Currents. He has some
TS parts FDR SALE and will try
to send us a list...
881114/280 Catalog Sheet from:
Cambridge Direct;;
312-564-5512..
Similar to 881020...

881114/Catalog, (16) pages
from: ENSoft;; Peter Hale??;
617-889-0830; Proprietor??;
P.O.Box 8763; Boston; MA;
02114-0763; USA..
ENSoftware:

Description	5.25in Micro- 720K Drive	5.25in Disk Cart.
88 CAM Master demo	6.95	n/a
88 BLUTTER	7.95	9.95
88 BMProgs	9.95	11.95
88 DBaddress	14.95	16.95
88 HELPER	14.95	16.95
88 DBTutor	19.95	21.95
88 MAILBAG	19.95	21.95
88 QLAND LORD	19.95	21.95
88 TAI-I-QL/80	19.95	21.95
88 TAI-I-QL/87	19.95	21.95
88 TRUST FUND	19.95	21.95
88 The Transfer_V3	89.95	89.95
88 Lashed NL	119.95	119.95
88 CAM MASTER full	250.00
	n/a

Description	Cass- ette
88 WORD8	19.95
88 WORD8 'personality module' for printer Interface	19.95
88 ABSORT	19.95
88 FILE8	19.95
88 COPY8	19.95

Descriptions in SLLI files or
contact ENSoft directly...

881114.1555/Call from: Roger
Baldeon; 404-447-4251;; 5059
Poplar Street;; Doraville;
GA; 30340..

Roger found out about us free
Compute! 881121..
He reports he has had a TS2040
for about 4 years. He also has
the TS2040 printer and a speech
synthesizer. He got an Atari
800 XL System about a week

ago.. Roger also says that TS Vendors: WJD Data Systems;; 516-543-5252 (from Computer Bargain Line No. 1, Sept. 1988); now carries the TS2048 Technical Manual and that he intends to get one..

Rogers: Thanks for your interest. Hope you decide to subscribe! If you contact any of the TS User Groups listed on page 7 of the attached SincLink 8810-11, tell us which ones are answering their mail...

8 881113/Call from: Andy Hradsky..

Andy reports a New User was born to Stephanie and he is son Nov. 37. Congratulations!..

He also reports he thinks he can get into the next TIMELINEZ;; SincLink 8810-11;;

88 "sn88th doc";

88 Table of Contents..

88 Disk (Media) Exchange..

88 8810 S112 Contacts (34)..

88 8807 S112 Contacts (33)..

88 Maybe 'sn88.doc'?..

88 Modified Records from

si88 doc;;

88 'What is SincLink? What are the Advantages of Subscribing to SincLink?; How do I Subscribe to SincLink?..

88 'Back Issues of TIMELINEZ/SincLink...'..

Andy suspects that with the present \$15/yr. subscription rate we can maintain the same number of issues per year with the same number of pages as in the past..

A brief summation of past TIMELINEZ issues follows: (82) pages per year average..

88 8807;; (10)issues;; (92) pages;;

88 8712;; (12)..

88 8710-11;; (12)..

88 8708;; (9)1 (8)..

88 8707-8;; (8)..

88 8706;; (8)..

88 8705;; (8)..

88 8704;; (8)..

88 8703;; (8)..

88 8702;; (8)..

88 8701;; (12)..

88 1986;; (8) issues;; (72) pages;;

88 8611-12;; (12)..

88 8609-10;; (8)..

88 8607-8;; (10)..

88 8606;; (8)..

88 8605;; (8)..

88 8604;; (8)..

88 8602-3;; (10)..

88 8601;; (8)..

88 1985;; (9) issues;; (84) pages;;

88 8512;; (10)..

1988 Dec 09 10:16:50

File: sx88 lis

88 250.107(); words: 1661();

(8)L1X(); E()change;;

Filenames: sx88 (sx88a)

{2_Pages (Files)};;

S112 Newsletter Exchange 88 (12? Months), 8810? Addresses?...
File Name
(Number
of
newsletters):

Newsletter	Issue	P	Date
Name			Name
-----	-----	-----	-----

sx8812? (22):
the HACKER 8812 10 1205

WITE-TIMES NEWS 8811 8 1202

sx8811? (6):
KATS NEWS 8811? 2 1125

SWIG BYTES 8811 8 1125

SINCOS NEWS 8811-12 10 1125

PACC TALK 8811? 8 1114

88 8510-11;; (10)..
88 8509;; (10)..
88 8508;; (10)..
88 8507;; (10)..
88 8506;; (10)..
88 8505;; (10)..
88 8504;; (2)..
88 8503;; (10)..
88 8502;; (10)..
88 8501;; (10)..
88 8500;; (12) issues;; (94) pages;;

88 8412;; (8)..
88 8411;; (8)..
88 8410;; (8)..
88 8409;; (8)..
88 8408;; (8)..
88 8407;; (8)..
88 8406;; (8)..
88 8405;; (10)..
88 8404;; (2)..
88 8403;; (10)..
88 8402;; (8)..
88 8401;; (8)..
88 8312;; (11)..
88 8311;; (10)..
88 8310;; (10)..
88 8308-9;; (10)..
88 8307-8;; (12)..
88 8306?;; (8)..

Andy also reports he has contacted Ed Burton: 209-384-2399;; 1611 Rose Ave.; Mercado; CA; 95340, about returning the Wafadrive and Spectrum? Ed borrowed from the Hardware Library..

Andy needs the Wafadrive System for a project he is working on..

Ed says he is not using it and will mail it back...
8 881112/TCM TS S112 Meeting..

Jim Howell reports the '88 S112 Group' meets the 2nd Wednesday of the month at 7:30pm at Sonny's Restaurant on Powers near Highway 101..

Topics: 'Information Sharing Strategy' by Bill Miller..

Focus on ASCII Files..

Use UNIX type 'grep' and 'awk' programs for searching...
8 881110/Letter from: Glen Matts;; ACD-TEL-MURB?;; 1255 Richelieu;; Houston;; TX;; 77018..

Glen includes a BASE. Thanks Glen!..

Glen's letter says... I am new. I have the computer.. I don't know anything.. Can you assist?..

Seen in magazine? 88 Nov. ...

I am interested in HAM and science..

Thanks..

Glen!..

Glen!..

ST; ZIPCD.. ...

8 881005/Newsletter Exchange, SincLink 8810, (4 Pages?); GUTS/BV (Group Using Jinxz)

S112 Newsletter Exchange 8810 Addresses (27):...
I ANSI Date Code (Date last Newsletter Received)/Record Type (Newsletter Exchange), Record Description (Last Newsletter Name Issue, (Number of Pages)); Organization; Name; Telecommunications Information; Position; Address; City; State; Zipcode; Country.. Other Contacts:
88 Name?; (ACD)TEL-MURB?; Position; Address; City; ST; ZIPCD..
88 Name?; Position?; (ACD)TEL-MURB?.. Other Exchanges?; Group; Name?; (ACD)TEL-MURB?; Position; Address; city; ST; ZIPCD..

8 88101/Newsletter Exchange, UPDATE Magazine 8810, (80 Pages); UPDATE Quarterly; Bill Jones; 904-871-4513; Publisher; 1317 Stratford Ave.; Panama City; FL; 32404; USA...
8 880026/Newsletter Exchange, TIMELINEZ/SincLink (TIMELINEZ/SincLink) 8807-8, (16 Pages); BUTS/BV (Group Using Jinxz Sinclair of Silicon Valley); Andy Hradsky; (408)270-9750; Managing

Bid you find out about us from Computer? 8811?.. We all were new when we started out. TS computers are a good place to start. Do you have a TS1000, TS2048, or BL?..

We can help by trying to answer any specific questions you have.. We can also supply back issues of TIMELINEZ/SincLink. They are \$1.00 each. The 0412 issue has an index to previous issues. You may wish to order it first..

We also have a Software Library, a Hardware Library, and a Document Library. SincLink Subscribers may check out items from these libraries for a deposit (refundable) equal to the price of the item plus a nominal shipping and handling fee..

For TS HAM info you may wish to contact QZX. Their address is on page 7 of the attached SincLink 8810-11..

Hope this helps...
8 881110/Note to: Andy Hradsky..

Andy: Enclosed are (2) SincLink 8810-11 (Double Size) for pasting up into the next TIMELINEZ..

Hope you have room for most of this so we don't have to publish a separate SincLink...
8 881107/Letter from: Jesse L. Peeler (an8507@jpl); ACD-TEL-MURB?; Apple 186 - Escala 1250; Costa Rica; Contramerita..

Jesse encloses a BASE with 40.45 US Postage. Thanks Jesse!..

Jesse asks about information on the 'internally' Mounted 64K computers..

He is also interested in other information on Hardware add-ons with schematic diagrams..

Jesse: We have enclosed the article 'Internal 64K RAM for the TS/21' by Tio Stoddard; CIS 073127, 2644; 85-48 6th Road; Rego Park; NY; 11374..

From: TIMEDESIGN Magazine 8705-6 Page 27-28; 503-824-2550; 2772 Mult Rd.; Colton; CA; 92317.

Hope this is what you are looking for! Tell us how it works out. For other information on Hardware add-ons, we have found TIMEDESIGN Magazine to be a good source of information. You may want to contact them about

purchasing back issues or subscribing...
8 881107/Letter from: Ray Youngberg; 513-890-4737; 4335 Freeport Drive; Dayton; OH; 45415..

Ray encloses a list of his entire TS1000 and TS2048 Hardware, Software, Books, Manuals, and Magazines FOR SALE. Complete list in SLL Files, or contact Ray directly...
8 881107/Catalog Sheet for Z80 MacPac (8799) from: The Marketing Clinic; Nigel Searle; 603-352-9838; POSITION?; 16 Church Street; Keene; NH; 03431; USA.. Z80 MacPac (8799) available from CAMBRIDGE North America/SSI Computer Systems, Inc.; 207-761-3720; 424 Cumberland Avenue; Portland; ME; 04101...
8 881105/TCM TS S112 Meeting;; Attendace? (13).. Topics: 'Microsoft Windows' by Dick Belp; Demo on an 80286 PC Clone...
8 881104-1234-1241/Call from: John Dick; 319-354-2320; 2128 S. Riverside Dr., Lot 811; Iowa City; IA; 52244..

John wants to use a TS1000 in a Controller/ Piano Tuning Application. He asked about a 'TS1000 Memory Map'. He suggested 'The complete ZX-81 ROM Disassembly' by Dr. Ian Logan and Dr. Frank D'Mars..

John is also interested in a source for the TS1000 ULA Chip. He suggested Curry Computer,

1-802-276-2982; or Zebra

Systems, 718-271-2305..

Can anyone else help?...
8 881103/Letter from: Mrs. Doris Bernstein; 213-431-1198; 12200 Monticello Rd.; J1061; Seal Beach; CA; 90740..

Mrs. Bernstein reports she has a Digital Rainbow Version 2.0 Computer System she is interested in donating to a charitable organization..

Can anyone tell her how much it is worth?...
8 881102/PC UN11 S112 Meeting;; Topic: 'An Overview of the X Window System' by James N. Turner of Daisy Systems;; Handout: (39) Pages...
881107.1224; nc8811; END....

Editor; 2175 Aborn Rd.; 82623; San Jose; CA; 95121; USA.. Other Exchanges?:

88 BUTS/BV; Bill Miller; (408)253-3175; Information Coordinator & Meeting Host;

6675 Clifford Dr.; Cupertino; CA; 95014-5330..

88 TSEBZUS; John Ezike; (415)843-5507; Meeting Host & TSEBZUG Editor; 1619 Grant St.; #4; Berkeley; CA; 94703..

88 TSPUG; George Mockridge; (415)878-1773; TSPUG Editor & Newsletter Exchange Chairmn; 311 Michelle Lane; Daly City; CA; 94015..

88 TSPUG; Rev. Walter E.

Johnson; (415)696-6212; Meeting Host; 1783 El Caimo Real; Burlingame; CA; 94010..

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ROOM 380C (downstairs)

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E B Z U C

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7777 NORTH SERINOLE BLVD.
SERINOLE, FL

DATES: DECEMBER 10, 1988
JANUARY 14, 1989
FEBRUARY 11, 1989

Z88 Technical Specification

Design Four-chip design—CPU, ROM, RAM, gate array.

CPU Z80 (CMOS).

ROM 128K containing operating system and applications software together with BASIC/Assembler.

RAM 32K expandable via 32K, 128K, 512K and 1 megabyte to a maximum 3 megabytes, battery-backed from the computer.

EPROM Up to 3 megabytes removable storage capacity via 32K, 128K, 512K and 1 megabyte packs.

Applications software Pipedream word-processing and spreadsheet applications.

Database. Calculator, diary, calendar, clock, alarms, printer editor, come as 'pop-down' screens.

Operating system OZ operating software, allows task-switching between applications without loading or exiting.

Language/Assembler Powerful BASIC.

Display 8 × 106 characters 'supertwist' LCD. Includes 8 × 80 working area, page map (shows where you are on a complete page), battery strength, alarm status.

Power 4 AA batteries provide 20 hours active computing or one year on standby.

Ports Three for memory-pack expansion, RS232 for popular printers and data import/export.

CAMBRIDGE
Z88

Z88 Accessories

RAM Packs Require no external power, and are available with 32K, 128K, and 512K capacity. 1 megabyte RAM packs available soon.

EPROM Packs Solid-state permanent storage, available in 32K, 128K and 512K. 1 megabyte EPROM packs available soon.

EPROM Eraser Z88 EPROM Eraser, completely deletes EPROM data—leaves you with a blank EPROM pack, ready for re-use.

PCLINK Consisting of software diskette and RS232 serial cable, allows transfer and receipt of ASCII files between the Z88, and an IBM or compatible PC. Also converts Z88 Pipedream files into either Wordstar or Lotus 1-2-3 files.

Links for other PCs available shortly.

Serial Printer Cable connects the Z88 to any printer with a standard serial port.

Parallel Printer Cable connects the Z88 to any printer with a standard parallel port.

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